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REPORT OF QUESTION ANSWERING RESPONSES ABOUT COURSES ON SUMMER SCHOOL NORWAY 2022[1]

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PUBLIC

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1. Executive Summary

This document refers to the centralized responses of the students about courses organized on the Summer School in Norway in period 24 July 2022 – 7 August 2022 in Melsom, Sandefjord, Norway. Detailed about organized summer school are presented in deliverable "Summer school activity report".

At the end of each course, each student received an anonymous questionnaire in which he was asked for his opinion related to certain aspects about the respective course. All students' responses were centralized in this deliverable. The template for the questionnaire is presented in deliverable "QA_C1_Training_evaluation_*.doc".

The students were asked to specify, based on 5 levels of satisfaction, the degree of satisfaction regarding the following aspects:

- By the topic(s) of the training?
- By the format of the training?
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?
- By the quality of the writing?

At each question can be offers also some comments and recommendations. In the second part of the questionnaire the student can suggest form his point of view some positive points about the training, the main weaknesses of the courses and whether it was beneficial or not for his expectations.

For each course, an indicator that reflect average value obtained of the course is computed. This value will be a number in between 1 and 5. For compute this indicator each satisfaction level will be converted into a number as follow:

- Most satisfied - 5
- Satisfied – 4
- Moderately satisfied – 3
- Rather dissatisfied – 2
- Not at all satisfied – 1

Each course has a code and in Table 1.1 the names of the courses and the corresponding code are listed. In some centralizing tables, only the respective course code will be used.

Course Name	Course code
AI (neural networks) + GA (genetic algorithms) – theory and applications	C1
IoTs sensors and actuators – theory and applications	C2a
IoT communication – theory and applications	C2b
IoT cloud integration – theory and applications	C2c

Using AI in fermentation process – theory and applications	C3
Digital design of food manufacturing processes – theory and applications	C4
Drones for gathering images and Computer Vision – theory and applications	C5
Assembly lines for picking fruits / vegetables – applications	C6
Develop your own business in agriculture and food industry – theory	C7

Table 1.1 The code of organized courses in the summer school 2022

2. Centralized responses for each course

1. *Course C1 - AI (neural networks) + GA (genetic algorithms) – theory and applications*

For this course 20 students completed the questionnaire, and the centralized response is presented in the Table 2.1, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	16	2	2		
By the format of the training?	15	4	1		
By the duration of the training?	14	3	3		
By the teaching method of the training?	15	4	1		
By the equipment resources used and available?	13	7			
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	16	4			
By the availability of additional materials?	17	2	1		
By the quality of the writing?	19		1		

Table 2.1. Centralized response for course C1

The indicator of average values obtained by this course is 4.725.

In Figure 2.1 are presented centralized responses in precents for each satisfaction degree for all questions.

Degree of satisfaction about course
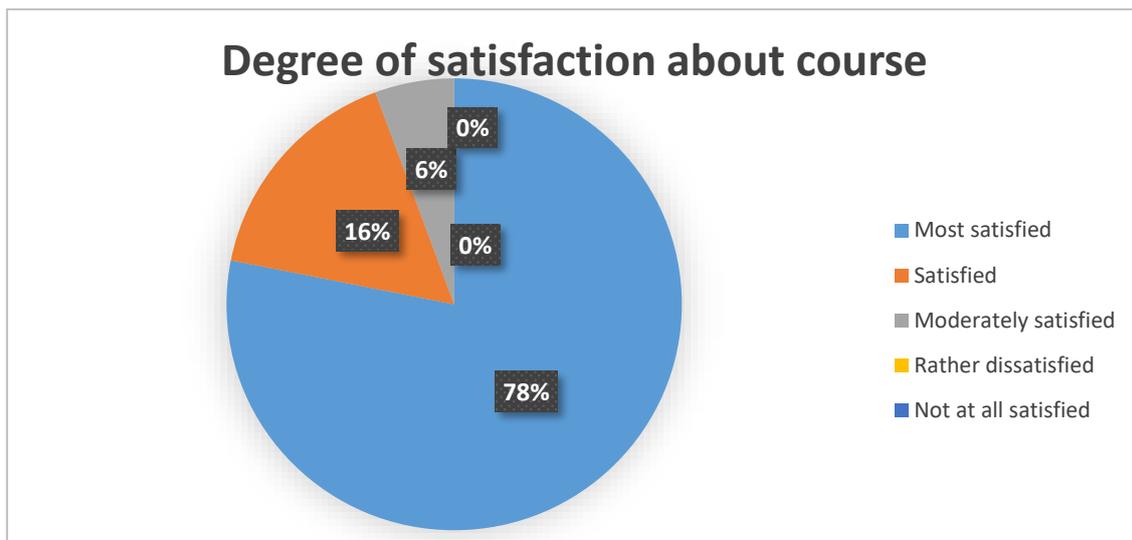
Figure 2.1 Degree of satisfaction about course C1.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
    - Very interesting and relevant
    - Topics were new and took time to grasp the concept. Simple intro and various real-world examples.
- By the format of the training?
- By the duration of the training?
    - Satisfied but it can be draining to it in lecture from 9 to 17.
- By the teaching method of the training?
    - The "QA" moments were very useful
- By the (equipment) resources used and available?
    - The application in very interesting from the implemented point of view
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
    - Up to date topics
- By the availability of additional materials?
- By the quality of the writing?

- Main positive points of the training:
    - Well-structured information
    - Relevant topic for finding solutions which target different fields
    - Great presentation, well explained topics
    - Interesting introduction into AI world, The importance of merging technology into the agriculture field.
    - Material was very well structured on 3 categories: GA + NN + Fuzzy
    - Well prepared teaching materials and good examples provided
    - The lecturers know exactly what the students need

- o It was an interesting course with many information about GA, NN -> the application with prediction of wine fermentation was perfect for students from Food department
  - o Applicability in a lot of domains. I found this course very interesting, and I like that what I learn can be applied in food industry too.
  - o I can use the information from the training to my domain (food industry).
  - o Helping agriculture to move into the age of digital intelligence.
  - o Wide subject approached in depth and at advanced level.
  - o Everything was thoroughly explained, especially for beginners.
  - o Concepts are new and interesting such that it can be used to carry out Future research. The concepts introduced could be added to our main course or interest.
  - o In this course we also meet things from the food industry.
  - o Interesting concepts and use of them.
  - o Important topics explained in an easy-to-understand manner. More application if possible.
- Main weaknesses of the training:
  - o Maybe, we should have taken 2-3 more breaks, because the training was long
  - o The server was very crowded and sometimes does not response
  - o I like more applications or "by doing …."
  - o Harder terms for someone who is not familiar with them. Even though it was a little bit harder to understand the terms, teacher explained them very well.
  - o Some terms and information are beyond my level of knowledge.
  - o Difficult information and terms.
  - o Shorter breaks but more often.
  - o I would have liked to have more knowledge about NN.
  - o A lot of details about these algorithms.
- Do you consider the training valuable regarding your initial expectations?
  - o I expected to learn about GA and I did gather some powerful knowledge

2. Course C2a - IoTs sensors and actuators – theory and applications

For this course 20 students completed the questionnaire, and the centralized response is presented in the Table 2.2, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	17	2	1		
By the format of the	14	5	1		

training?					
By the duration of the training?	14	3	3		
By the teaching method of the training?	16	3	1		
By the equipment resources used and available?	18	1	1		
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	18	1	1		
By the availability of additional materials?	15	3	2		
By the quality of the writing?	16	3	1		

Table 2.2. Centralized response for course C2a

The indicator of average values obtained by this course is 4.731.

In Figure 2.2 are presented centralized responses in precents for each satisfaction degree for all questions.
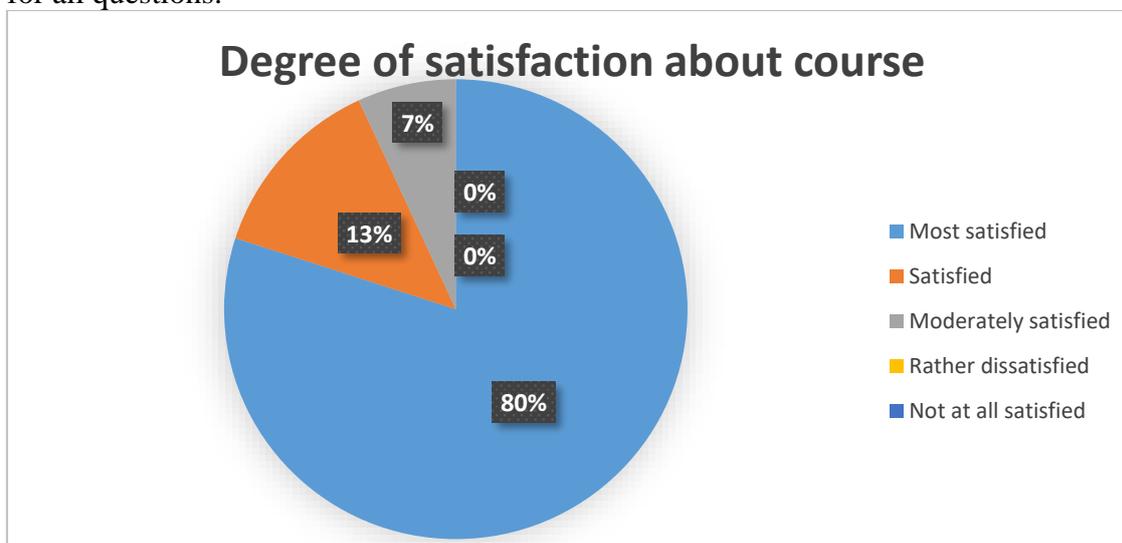
Figure 2.2 Degree of satisfaction about course C2a.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
    - Up to date topic.
- By the format of the training?
    - Practical + theoretical part was very good.
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?

- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?
  - Some of the libraries used in examples were missing.
- By the quality of the writing?
  - Right to the point.

- Main positive points of the training:
  - Availability of many different physical resources.
  - A good introduction for beginners.
  - We had enough time to develop each application. The support was great.
  - The possibility of testing all the sensors was really interesting.
  - I can use the knowledge from training to my specialization.
  - Useful information about IoT. The topics were perfect chosen for students from food department. I like to work with sensors and Arduino. "By doing" activities were perfect for me.
  - Able to use and play with sensors and components.
  - Using the sensors was very useful.
  - Excellent hands-on experience and good teaching skills.
  - Many practical applications.
  - The practical/hands-on experience.
  - I learned how to use the app and build different prototypes using sensors.
  - Applicability in several fields. I like the fact that this course was understandable to everyone.
  - Interesting and captivating. I learnt a lot and made me much more curious about sensors.
- Main weaknesses of the training:
  - All students were expected to know more than the basics of programming.
  - Things moved too slow.
  - There were some delays between tasks because some of them required more time.
  - Short span of time for this much information.
  - I find it quite to connect certain things because I haven't learned that yet.
  - I can't find any weaknesses.
  - It finished. I was hoping to last longer.
- Do you consider the training valuable regarding your initial expectations?

## 3. *Course C2b - IoT communication – theory and applications*

For this course 20 students completed the questionnaire, and the centralized response is presented in the Table 2.3, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	18	2			
By the format of the training?	15	5			
By the duration of the training?	16	3	1		
By the teaching method of the training?	16	4			
By the equipment resources used and available?	19	1			
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	18	1	1		
By the availability of additional materials?	16	4			
By the quality of the writing?	17	3			

Table 2.3. Centralized response for course C2b

The indicator of average values obtained by this course is 4.831.

In Figure 2.3 are presented centralized responses in precents for each satisfaction degree for all questions.
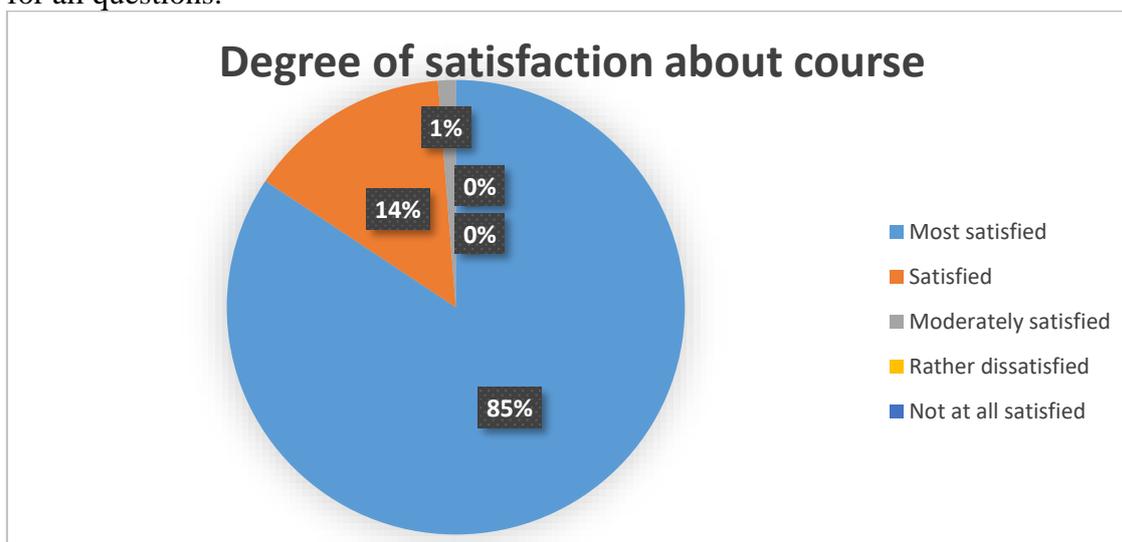
Figure 2.3 Degree of satisfaction about course C2b.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
- By the format of the training?

- o Practical + theoretical split very good
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?
- By the quality of the writing?

- Main positive points of the training:
  - o Many practical applications.
  - o The mixture of theoretical and practical staff.
  - o I can use the information from training to my specialization.
  - o "By doing" application – connection IR, RADIO, RFID. More about Thingspeak platform.
  - o Good I^2C, RF, Internet, BT communication examples and excellent hands-on experience.
  - o Acquirement of new knowledge and updating the existing one.
  - o The hands-one experience.
  - o Experimenting with various sensors and knowledge gained.
- Main weaknesses of the training:
  - o A little bit difficult dealing with Wi-Fi connection.
  - o Maybe 2-3 more breaks would have been even better.
  - o I couldn't find one.
  - o Short span of the time for this much information.
  - o Pace could have been faster.
  - o The professor should try to interact more.
- Do you consider the training valuable regarding your initial expectations?

4. Course C2c - IoT cloud integration – theory and applications

For this course 20 students completed the questionnaire, and the centralized response is presented in the Table 2.4, where is presented the number of students who checked that option.

| Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	18	2			
By the format of the training?	16	4			
By the duration of the	15	4	1		

training?					
By the teaching method of the training?	13	6		1	
By the equipment resources used and available?	16	4			
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	18	2			
By the availability of additional materials?	15	5			
By the quality of the writing?	16	4			

Table 2.4. Centralized response for course C2c

The indicator of average values obtained by this course is 4.775.

In Figure 2.4 are presented centralized responses in precents for each satisfaction degree for all questions.
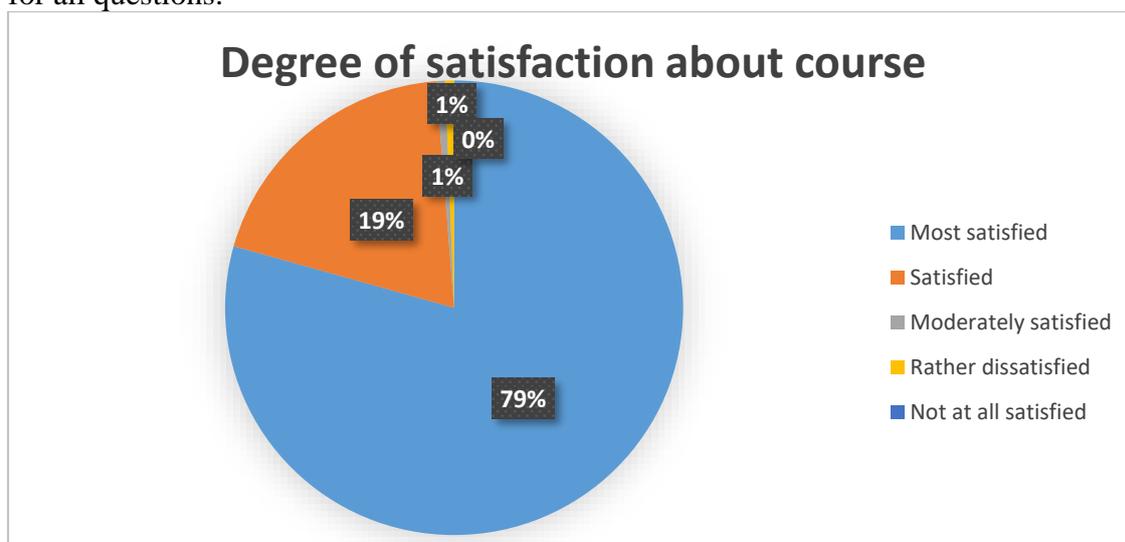
Figure 2.4 Degree of satisfaction about course C2c.

Comments provided by students regarding this course, separate for each question:
- By the topic(s) of the training?
  - Up to date topic.
- By the format of the training?
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?

- By the availability of additional materials?
- By the quality of the writing?

- Main positive points of the training:
    - New ideas and an innovative way of building up IoT system.
    - Good practical examples. Good teaching skills.
    - Great collaboration, explanation, and support from anyone.
    - Using Thingspeak for collected data in order to represent the "analyzed parameters" in charts.
    - Great presentation, many practical applications.
    - Very interesting topics, well presented, many applications.
    - Theory was exemplified with applications in a useful way.
    - Good advice and documentation.
    - Learn about IoT platforms.
    - Learn about communications protocols and cloud integration.
    - Thingspeak is a useful tool for IoT cloud integration.
- Main weaknesses of the training:
    - Not much was accomplished.
    - Could have been more in depth.
    - Hard to use platform if you weren't past of USN.
- Do you consider the training valuable regarding your initial expectations?

5. *Course C3 - Using AI in fermentation process – theory and applications*

For this course 19 students completed the questionnaire, and the centralized response is presented in the Table 2.5, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	16	3			
By the format of the training?	15	4			
By the duration of the training?	16	2	1		
By the teaching method of the training?	15	4			
By the equipment resources used and available?	12	5	2		

By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	17	2			
By the availability of additional materials?	14	4	1		
By the quality of the writing?	16	3			

Table 2.5. Centralized response for course C3

The indicator of average values obtained by this course is 4.770.

In Figure 2.5 are presented centralized responses in precents for each satisfaction degree for all questions.
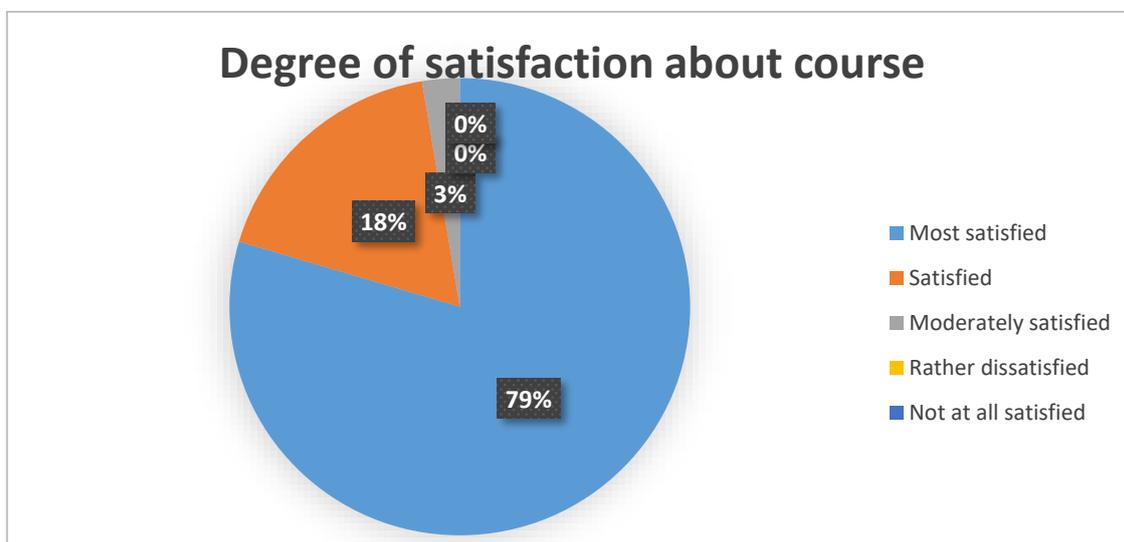
Figure 2.5 Degree of satisfaction about course C3.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
- By the format of the training?
    - More practical work
- By the duration of the training?
- By the teaching method of the training?
    - Alternating theory practice
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?
    - A lot of good references.
- By the quality of the writing?

- Main positive points of the training:
  - Highly intensive topic. Large subject covered.
  - Being interesting.
  - Useful in my domain.
  - Developing a model in Simulink.
  - Very interesting topics.
  - Application was based on an interesting process. Having a background in food industry, especially in wine production, found this course helping and enriching.
  - For the wine industry, adding a software application to supervise alcoholic fermentation is a gamechanger. I like working in MATLAB (Simulink).
  - Good MATLAB and Simulink introduction. The complexity of the system is high, but the teaching methods made it easier to understand.
  - My knowledge of the white wine fermentation process has improved.
  - Learning about GA in wine fermentation. Appling GA in wine fermentation.
  - For me it was interesting to learn about the wine fermentation and about things that target chemistry topic.
  - New information and very well structured.
- Main weaknesses of the training:
  - Too much theory.
  - Being too short.
  - I can't find.
  - Sometimes were too hard for someone that is not invested in this domain.
  - Information is a little hard to understand for someone with no previous knowledge in this domain.
  - Was too short. Over though the duration was of 3 hours, it felt so short.
  - Some concepts are difficult to understand.
- Do you consider the training valuable regarding your initial expectations?

6. *Course C4 - Digital design of food manufacturing processes – theory and applications*

For this course 19 students completed the questionnaire, and the centralized response is presented in the Table 2.6, where is presented the number of students who checked that option.

	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	14	3	2		
By the format of the training?	14	5			

By the duration of the training?	15	4			
By the teaching method of the training?	15	2	2		
By the equipment resources used and available?	13	3	3		
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	16	3			
By the availability of additional materials?	13	5	1		
By the quality of the writing?	16	3			

Table 2.6. Centralized response for course C4

The indicator of average values obtained by this course is 4.710.

In Figure 2.6 are presented centralized responses in precents for each satisfaction degree for all questions.
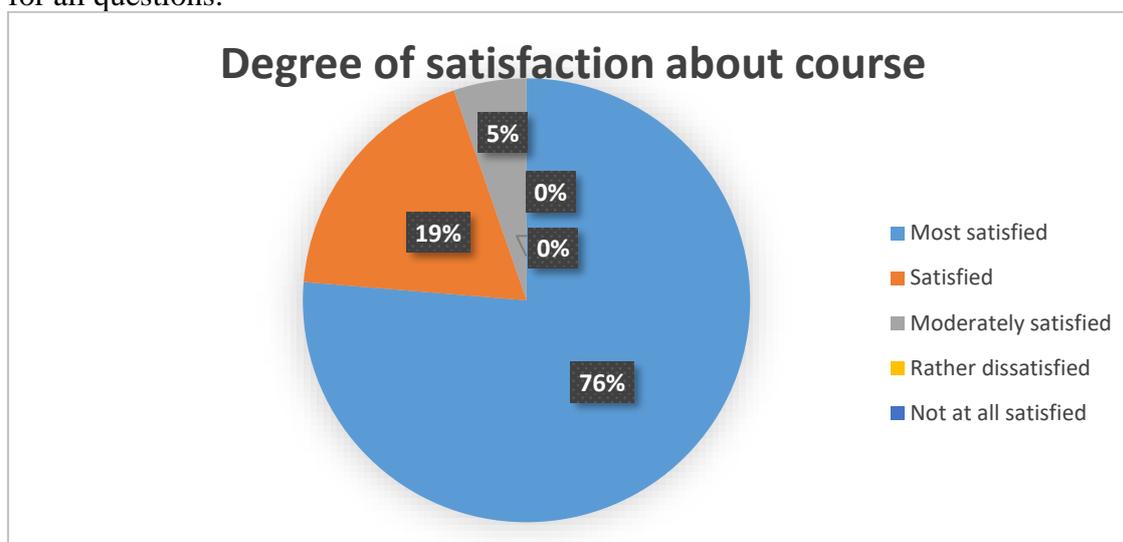
Figure 2.6 Degree of satisfaction about course C4.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
- By the format of the training?
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?

- By the quality of the writing?

- Main positive points of the training:
  - Useful topics especially in the context of automation and digitalization.
  - Great teaching skills in presentation Petri Nets using TINA software. Good usage example in modelling processes.
  - TINA tool was pretty simple to use.
  - Information that can be used in several fields of activity. Moderate level of difficulty of using the application; the robotic arm picking tomatoes impressed me.
  - The idea of creating a robotic arm to harvest vegetables seems to me a very innovative idea.
  - The program used during this course has applicability in organizing a process in a Food Factory.
  - Well-structured information.
  - Learn something about digital design of food process.
  - Learned more about modelling since I never did that.
  - The topic of the training was interesting.
  - Connection with a lot of domains.
- Main weaknesses of the training:
  - TINA was a bit difficult. I think that the time was also not enough for learning this tool.
  - More applications.
  - Some notions were difficult to understand.
  - I couldn't find.
  - Not enough time.
  - Moved too fast on examples.
- Do you consider the training valuable regarding your initial expectations?

7. Course C5 - Drones for gathering images and Computer Vision – theory and applications

For this course 19 students completed the questionnaire, and the centralized response is presented in the Table 2.7, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	17	2			
By the format of the training?	11	8			
By the duration of the training?	12	7			

By the teaching method of the training?	9	9	1		
By the equipment resources used and available?	17	2			
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	14	4	1		
By the availability of additional materials?	10	7	2		
By the quality of the writing?	8	7	4		

Table 2.7. Centralized response for course C5

The indicator of average values obtained by this course is 4.592.

In Figure 2.7 are presented centralized responses in precents for each satisfaction degree for all questions.
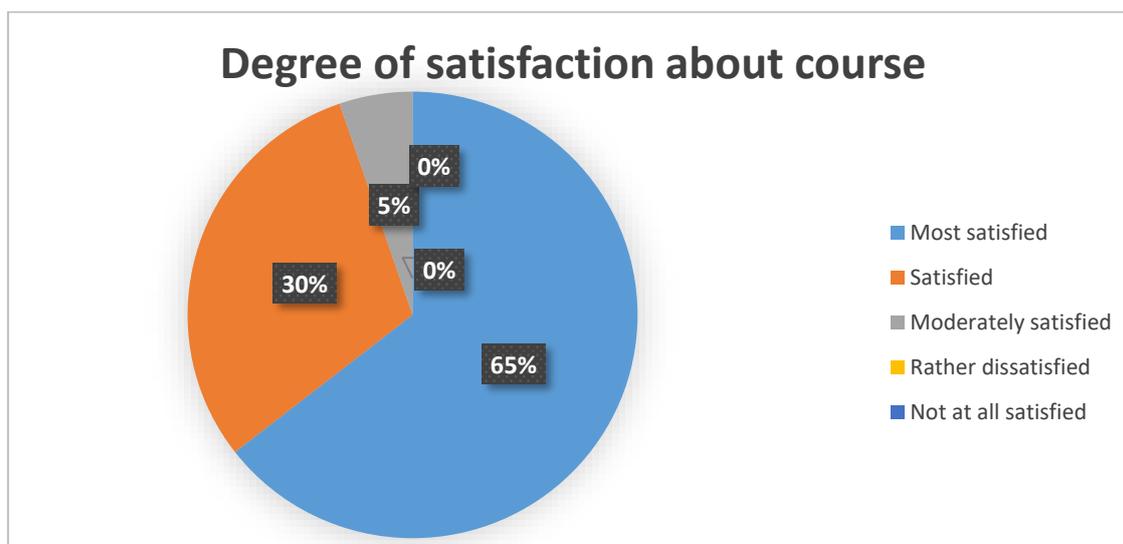
Figure 2.7 Degree of satisfaction about course C5.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
- By the format of the training?
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?
- By the quality of the writing?

- Main positive points of the training:
  - o Very interesting applications.
- Main weaknesses of the training:
  - o There are necessary computer science skills.
  - o It should be useful to know before some ideas about image processing.
- Do you consider the training valuable regarding your initial expectations?

## 8. Course C6 - Assembly lines for picking fruits / vegetables – applications

For this course 19 students completed the questionnaire, and the centralized response is presented in the Table 2.8, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	18	1			
By the format of the training?	19				
By the duration of the training?	17	2			
By the teaching method of the training?	17	2			
By the equipment resources used and available?	19				
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	18	1			
By the availability of additional materials?	17	2			
By the quality of the writing?	17	2			

Table 2.8. Centralized response for course C6

The indicator of average values obtained by this course is 4.934.

In Figure 2.8 are presented centralized responses in precents for each satisfaction degree for all questions.
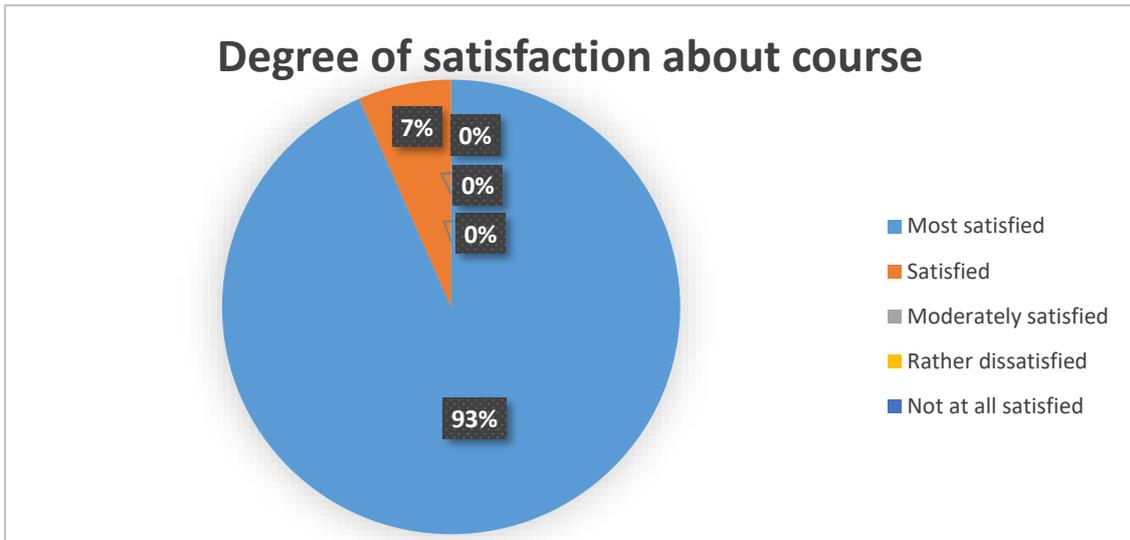
Figure 2.8 Degree of satisfaction about course C6.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
- By the format of the training?
- By the duration of the training?
- By the teaching method of the training?
- By the (equipment) resources used and available?
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
- By the availability of additional materials?
- By the quality of the writing?

- Main positive points of the training:
    - The applicative part was great. We focused on the implementation, not on the theory.
    - The experiments done on robots. The possibility to control the robots.
    - The teacher combine technology with agriculture domain. The robots were funny and easy to be commanded by a Food engineer.
    - It was an interesting course from which I learned how to control robots.
    - The BeeUp tool it's easy to understand. Can be really fun to work with robots like mBot.
    - Many applications, hands-on experience.
    - Great applicative exercises. Good robots (mBot and DoBot) help to understand how pick-up assembly lines work and moved the benefits of using than.
    - Nice robots. Nice modelling and automation examples.
    - We had used a platform for beginners.
    - I enjoyed controlling the robots. Bee-up tool really easy to use.
    - Many interesting topics presented, very applicative.
    - Hands-on time with robots.

- o Having to play with the robots. I really enjoined playing with the robots and it was interesting to program them to do something different.
    - o Nice hands-on work with the robots.
- Main weaknesses of the training:
    - o No weaknesses.
    - o I didn't find any weakness on this training.
    - o Unexpected exists to the server that shortened the time for use of robots.
- Do you consider the training valuable regarding your initial expectations?

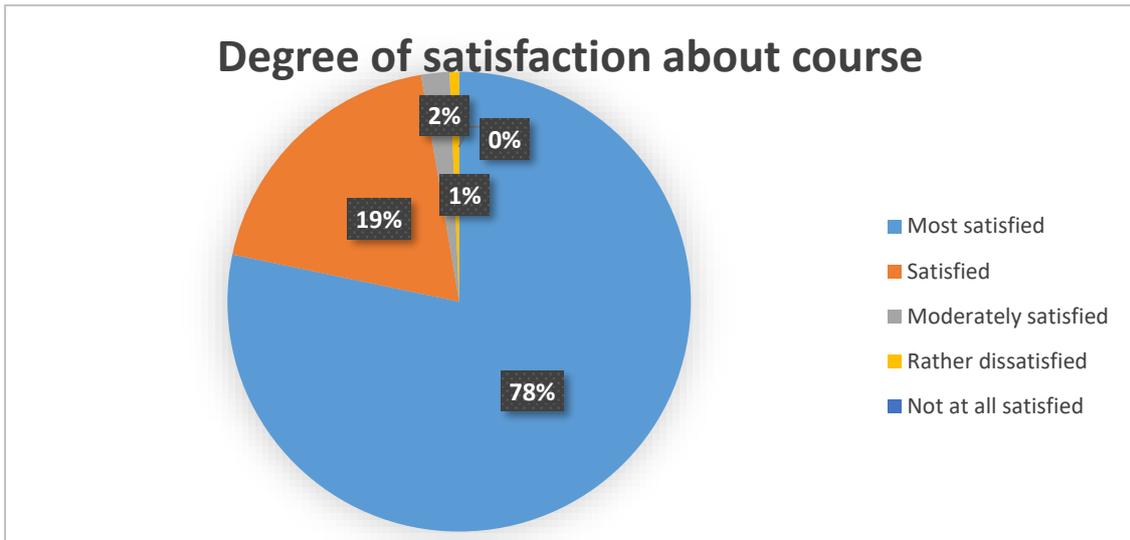## 9. *Course C7 - Develop your own business in agriculture and food industry – theory*

For this course 19 students completed the questionnaire, and the centralized response is presented in the Table 2.9, where is presented the number of students who checked that option.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	15	4			
By the format of the training?	13	5	1		
By the duration of the training?	16	3			
By the teaching method of the training?	16	1	2		
By the equipment resources used and available?	12	6		1	
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	18	1			
By the availability of additional materials?	13	6			
By the quality of the writing?	16	3			

Table 2.9. Centralized response for course C7

The indicator of average values obtained by this course is 4.750.

In Figure 2.9 are presented centralized responses in precents for each satisfaction degree for all questions.

Degree of satisfaction about course

Legend:
- Most satisfied
- Satisfied
- Moderately satisfied
- Rather dissatisfied
- Not at all satisfied

Values: 78%, 19%, 2%, 1%, 0%

Figure 2.9 Degree of satisfaction about course C7.

Comments provided by students regarding this course, separate for each question:

- By the topic(s) of the training?
- By the format of the training?
- By the duration of the training?
  - It can be a bit longer.
- By the teaching method of the training?
- By the (equipment) resources used and available?
  - Have also a device to show.
- By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?
  - Very high relevance in practice.
- By the availability of additional materials?
  - Include more external use cases.
- By the quality of the writing?
  - Very good slides.
- Main positive points of the training:
  - Practical examples. Presenter experience.
  - Very relevant practical theme. Relevant examples and use cases.
  - Innovative ideas.
  - Some ideas about how the business works.
  - Modern and up-to-date information.
- Main weaknesses of the training:
  - Less compatible with my domain.
  - None.
  - Too short.
  - I can't find.
- Do you consider the training valuable regarding your initial expectations?

3. Centralized responses for entire summer school

For the entire summer school, we have 175 completed questionnaires, and the centralized response is presented in the Table 3.1, where is presented the number of students who checked that option for all courses.

Question	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
By the topic(s) of the training?	149	21	5		
By the format of the training?	132	40	3		
By the duration of the training?	135	31	9		
By the teaching method of the training?	132	35	7	1	
By the equipment resources used and available?	139	29	6	1	
By the relevance of the subject matter(s) and knowledge brought by the teacher regarding summer school topics?	153	19	3		
By the availability of additional materials?	130	38	7		
By the quality of the writing?	141	28	6		

Table 3.1. Centralized response for all courses

In Figure 3.1 are presented centralized responses in precents for each satisfaction degree or all questions.

Report of QA for 1ˢᵗ Summers School

Degree of satisfaction about all courses
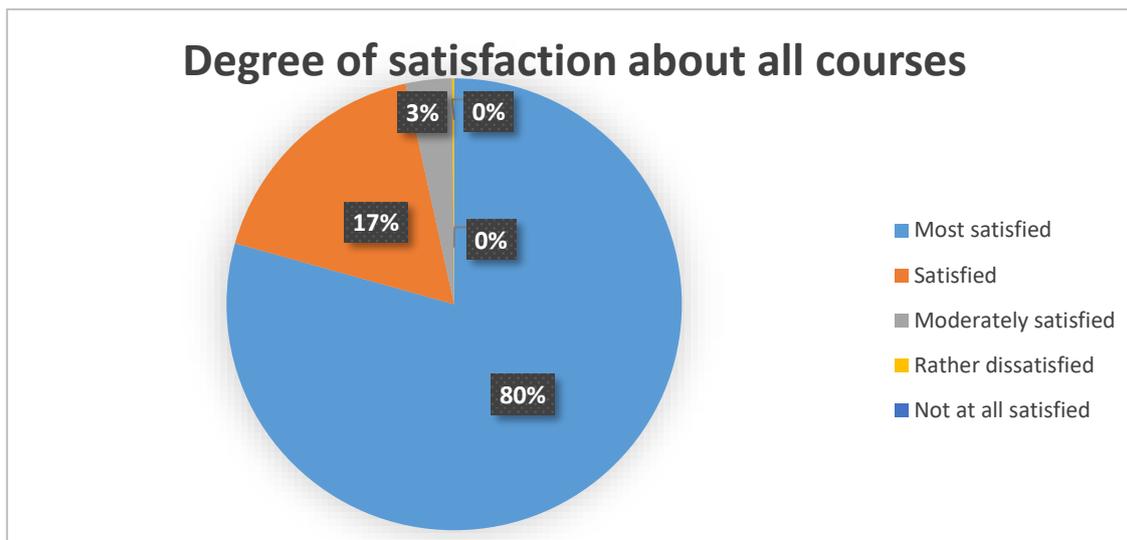
Figure 3.1 Degree of satisfaction about all courses.

In table 3.2 are presented comparative satisfaction degree obtained by all courses for each level of satisfaction separately.

Course	Most satisfied	Satisfied	Moderately satisfied	Rather dissatisfied	Not at all satisfied
C1	78.13%	16.25%	5.63%	0.00%	0.00%
C2a	80.00%	13.13%	6.88%	0.00%	0.00%
C2b	84.38%	14.38%	1.25%	0.00%	0.00%
C2c	79.38%	19.38%	0.63%	0.63%	0.00%
C3	79.61%	17.76%	2.63%	0.00%	0.00%
C4	76.32%	18.42%	5.26%	0.00%	0.00%
C5	64.47%	30.26%	5.26%	0.00%	0.00%
C6	93.42%	6.58%	0.00%	0.00%	0.00%
C7	78.29%	19.08%	1.97%	0.66%	0.00%
Average	**79.33%**	**17.25%**	**3.28%**	**0.14%**	**0.00%**

Table 3.2 Comparative satisfaction degree for all courses

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The satisfaction indicator obtained by each course is presented in Table 3.3

Course	Satisfaction indicator
C1	4.725
C2a	4.731
C2b	4.831
C2c	4.775
C3	4.770
C4	4.711
C5	4.592
C6	4.934
C7	4.750
Average over all courses	**4.758**

Table 3.3 The average satisfaction indicator

4. Conclusions

As can be seen, no student who answered the questionnaire ticked the option "Not at all satisfied" and only 2 questionnaires were ticked the option "Rather dissatisfied", most of the answers 1111 (79.36%) ticked the option "Most satisfied" and 241 (17.21%) ticked the option "Satisfied" and only 46 (3.29%) ticked the "Moderately satisfied" option.

Looking at the level of satisfaction of the students, we note that the summer school had a good level of satisfaction for the students (4.758 as average satisfaction indicator).

Also, in this report for each course, the criticisms, comments, and suggestions offered by the students were centralized so that they can be taken into account for the next summer school.

Obviously, the teaching staff will try to improve the courses based on students' feedback so that the next summer school would obtain an even better level of satisfaction.